

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions and listings of claims in the application:

1. (Currently Amended) An implantable sensor ~~apparatus~~ system for taking readings from a patient in vivo, the sensor ~~apparatus~~ system comprising:
an implantable sensor having a distal end with a sensor tip for direct contact with patient fluids;
a flush sleeve directed towards the sensor tip;
a rinsing fluid; and
a fluid conduit in fluid communication with the flush sleeve, wherein a the rinsing fluid received in the fluid conduit ~~in fluid communication with the flush sleeve~~ is used to spray the sensor tip,
wherein the flush sleeve concentrically surrounds the implantable sensor around a substantially generally common axis, such that the sensor is within the flush sleeve.
2. (Currently Amended) The sensor ~~apparatus~~ system of claim 1, further comprising a connector fitting for supporting the implantable sensor within the patient.
3. (Currently Amended) The sensor ~~apparatus~~ system of claim 1, wherein the fluid conduit contains a septum, and wherein a needle is used to pierce the septum to inject the fluid into the fluid conduit.
4. (Currently Amended) The sensor ~~apparatus~~ system of claim 1, wherein the flush sleeve surrounds the implantable sensor in a tight fit connection.
5. (Currently Amended) The sensor ~~apparatus~~ system of claim 4, wherein the flush sleeve contains at least one one-way valve near the sensor tip.

6. (Currently Amended) The sensor ~~apparatus~~ system of claim 1, wherein the fluid conduit is located at a proximal end of the sensor.

7. (Currently Amended) The sensor ~~apparatus~~ system of claim 6, wherein the proximal end of the sensor is covered by a protector sleeve.

8. (Currently amended) The sensor ~~apparatus~~ system of claim 12, wherein the sensor is plugged into the connector fitting, and the connector fitting is affixable internally to the patient.

9. (Currently Amended) The sensor ~~apparatus~~ system of claim 1, wherein the rinsing fluid is a saline solution.

10. (Currently Amended) The sensor ~~apparatus~~ system of claim 1, wherein the rinsing fluid contains an anti-coagulant.

11. (Currently Amended) The sensor ~~apparatus~~ system of claim 12, wherein the connector fitting is connected to a telemetry unit to transmit readings from the implantable sensor.

12-20. (Cancelled)

21. (Currently Amended) An implantable multi-lumen sensor ~~apparatus~~ system for taking readings from a patient in vivo, the sensor ~~apparatus~~ system comprising:
an implantable sensor having a distal end with a sensor tip for direct contact with patient fluids in an inner lumen; ~~and~~
an outer lumen comprising a flush sleeve surrounding the inner lumen in a generally substantially coaxial manner, such that the inner lumen is within the outer lumen; and
a rinsing fluid received in the flush sleeve to spray the sensor tip.

22. (Currently Amended) The sensor ~~apparatus~~ system of claim 21, wherein the flush sleeve surrounds the inner lumen in a tight fit connection.

23. (Currently Amended) The sensor ~~apparatus~~ system of claim 22, wherein the flush sleeve contains at least one one-way valve near the sensor tip.